

REMARKS

This amendment is in response to the Examiner's Office Action dated 12/17/2002. Applicant is appreciative for the recognized allowable subject matter. This amendment should obviate outstanding issues and make the remaining claims allowable. Reconsideration of this application is respectfully requested in view of the foregoing amendment and the remarks that follow.

STATUS OF CLAIMS

Claims 16, 19, 21, and 22 are pending.

Claims 19 and 21 are allowed.

Claims 16 and 22 stand rejected under 35 U.S.C. §112 second paragraph and first paragraph respectively. Additionally, claim 22 appears to be rejected under 35 U.S.C. §103(a) as being unpatentable over Purtilo et al in view of Gamma et al.

OVERVIEW OF CLAIMED INVENTION

The presently claimed invention provides for a system and method for encapsulating object definition information in a first notation in encapsulator objects defined at least in part in a second, typically different notation. The encapsulator objects expose native interfaces that may be interrogated to discover the foreign object definition information they encapsulate.

In one embodiment, encapsulator objects are created by a parser that parses foreign notation. Also, the parser is able to instantiate one or more encapsulator objects for each rule in a grammar that corresponds to a syntactic structure defined in the foreign notation. The parser may be included in an object factory which instantiates objects (e.g., CORBA objects)

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corresponding to the nonterminals of the syntax defined by a specification such as GDMO/ASN.1.

Additionally, the present invention also provides for a foreign object definition metadata repository. In this scenario, the foreign object definition metadata repository provides for a class having a native interface that accepts invocations using the encapsulator objects. Thus, such a repository can be used in the dynamic discovery of foreign object definitions.

In the Claims

Regarding claim 16, the Examiner's comment regarding inconsistency in the language of the claim has been corrected. Amended claim 16 is hereby respectfully submitted for reconsideration.

An inconsistency regarding claim 21 in the Amendment dated 12/17/2002 is hereby brought to the Examiner's attention. Claim 21 was originally allowed in the amendment dated 08/14/01. The inconsistency arose in the amendment dated 12/17/2002 wherein the Examiner has, on page 3, section 5, rejected claim 21, but has indicated, both in the office action summary and page 4, section 6, the allowance of claim 21. After a closer look at the office action of 12/17/2002, applicant believes that page 3, section 5 contains a typographical error and should refer to a rejection regarding claim 22. Thus, applicant's response to the office action of 12/17/2002 is based on the interpretation that page 3, section 5 refers to the rejection with respect to claim 22.

REJECTIONS UNDER U.S.C. §103

Regarding claim 22, the identified inconsistency in the language of the claim has been corrected without adding new material. Additionally, the Examiner has rejected claim 22 as being unpatentable over Purtilo et al. ("Module Reuse by Interface Adaption") in view of Gamma et al. (Design Patterns: Elements of Reusable Object-Oriented Software"). Specifically, the Examiner contends that it would have been obvious to: (a) implement adaptors and other software modules of Purtilo et al. using object-oriented objects, and (b) instantiate an object collection corresponding to rules specifying the syntax of an object invocation.

Applicant respectfully disagrees with the Examiner with regard to the rejection of claim 22. In order to show obviousness, when relying on a combination of references, there must be a suggestion or motivation in the references, or in the knowledge available to one of ordinary skill in the art, to combine the references. The Examiner contends that in pages 5-11 5-19 of the Purtillo reference discloses a step of "rearranging parameters of an interface pattern at the point of procedure/function call." Moreover, the Examiner equates this disclosed step to the step of "correlating the information of the content to construct the invocation."

In view of the current amendment to claim 22, applicant believes that the Purtilo reference, either by itself or in combination with Gamma et al., fails to teach a method for interrogating a collection of objects with received information to determine one or more objects within the object collection that are required to construct the invocation. Applicant believes that the Purtilo et al. reference merely provides for a declarative language that allows for parameters to be rearranged and transformed to match formal parameters of an interface (see page 5-11). Additionally, there is no motivation in either the Purtillo et al. reference or the Gamma et al. reference to "instantiate" an object collection based upon the syntax of an object invocation.

wherein such an instantiation is used to interrogate and identify a set of objects (within the collection of objects) that are required to construct the invocation.

Hence, in view of the amendment to claim 22 and the above mentioned arguments, applicant respectfully requests the Examiner to remove the rejection with regard to claim 22.

SUMMARY:

As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicant's presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

As this amendment has been filed after the three-month shortened statutory period, a petition for a one-month extension of time is included. The Commissioner is hereby authorized to charge any deficiencies in the fees provided to Deposit Account No. 12-0010.

If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact applicant's representative at the below number.

Respectfully submitted,

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